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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,028

09/15/2006

Hiroshi Uehara

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EXAMINER

CHIN, HUI H

ART UNIT

PAPER NUMBER

1796

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,028	<b>Applicant(s)</b> UEHARA ET AL.	
	<b>Examiner</b> HUI CHIN	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/26/2009</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This office action is in response to the Amendment filed on 2/11/2009.

Claim 1 has been amended, claims 1-9 are pending.

In view of the Amendment, the rejections on claim 1 under 35 U.S.C. 102(b) is withdrawn and claims 2-9 under 35 U.S.C. 103(a) are maintained.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tasaka et al. (JP 2002-322321) in view of Lai et al. (US Patent 5,272,236).

Tasaka et al. disclose an elastomer composition comprising: a) 100 parts by weight of at least one elastomer selected from the group consisting of a block copolymer comprising at least two of a polymer block A mainly consisting of an aromatic vinyl compound and at least one of a polymer block B mainly consisting of a conjugated diene compound, a hydrogenated block copolymer which is a hydride of the block copolymer and an olefinic copolymer rubber, b) 0.1-250 parts by weight of an

Art Unit: 1796

amorphous polyolefin, c) 1-100 parts by weight of an oil, and d) 1-100 parts by weight of an olefin system, wherein the block copolymer is styrene butadiene styrene (SBS); the copolymer rubber is ethylene-1-butene; and the olefin system is atactic polypropylene (claims; [0025]; [0034]; [0043]; [0048]). Attention is directed to Example 6, wherein it demonstrates a composition comprising 35 parts by weight of SBS, 45 parts by weight of ethylene-butene rubber, 17.5 parts by weight of oil, 17.5 parts by weight of paraffin, and 20 parts by weight of polypropylene.

However, Tasaka et al. are silent on the ethylene/1-butene random copolymer having specific relationship of MFR and molecular weight distribution.

Lai et al. disclose an ethylene/1-butene copolymer characterized as having:

(a) a molecular weight distribution , Mw/Mn, defined by the equation:

$$Mw/Mn \leq (I_{10}/I_2) - 4.63,$$

(b) a melt flow rate,  $(I_{10}/I_2) \geq 7$ , and

(c) a molecular weight distribution, Mw/Mn, of from about 1.5 to about 2.5 (claims 1, 13, and 27) to provide improved processability over conventional olefin polymers are useful in producing fabricated articles such as molded parts (abstract). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use this ethylene/1-butene random copolymer having specific relationship of MFR and molecular weight distribution to make the composition with the expected success.

4. Claims 2-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed et al. (US Patent 6,184,291) in view of Tasaka et al. (JP 2002-322321).

Ahmed et al. disclose an elastomeric composition comprising: a) from about 70 to about 90 percent by weight of a styrene triblock copolymer, b) from about 10 to about 30 percent by weight of an ethylene interpolymers characterized as an interpolymers of ethylene with at least one C<sub>3</sub>-C<sub>20</sub>  $\alpha$ -olefin (Claim 1). Ahmed et al. further disclose the use of extender oils (col. 15 lines 53-55).

Ahmed et al. are silent on the amount of oil.

The disclosure of Tasaka et al. is adequately set forth in paragraph 3 and is incorporated herein by reference.

A conclusion can be drawn that the appropriate amount of oil can be used with other components is 1-100 parts by weight in the disclosure of Tasaka et al. [0043]. This composition can be fabricated into articles such as fibers, films, coatings and moldings in the disclosure of Ahmed et al. (col. 15 lines 65-66). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the resin composition with the expected success because Tasaka et al. demonstrate that the 1-100 parts by weight of oil can be used to make the composition.

The limitations of claim 2 can be found in Ahmed et al. at col. 6, lines 13-18; col. 9, lines 12-16; col. 11, lines 46-47; col. 12, lines 4-5, lines 37-38, and claim 2, where it discloses the use of ethylene/1-butene having a density of about 0.875 g/cm<sup>3</sup> to about 0.905 g/cm<sup>3</sup>, an MFR of about 1 to 10 g/10 min, and a molecular weight distribution of about 1.5 to about 2.5, and the styrene block copolymer is styrene/butadiene/styrene.

Art Unit: 1796

The limitations of claims 3-5 can be found in Ahmed et al. at col. 16, lines 1-4, where it discloses various molding operations.

The limitations of claims 6-9 can be found in Ahmed et al. at col. 16, lines 15-22, where it discloses films, nonwoven fabrics, and articles for household and automotive.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUI CHIN whose telephone number is (571)270-7350. The examiner can normally be reached on Monday to Friday; 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ling-Siu Choi/  
Primary Examiner, Art Unit 1796

/HC/